## ABSTRACT OF THE DISCLOSURE

A first image processing apparatus performs a predetermined calculation with the use of digital image data and confidential information and then generates digital signature data in order to detect illegitimate processing applied to the digital image data. The first image processing apparatus sends the digital image data and the digital signature data to a second image processing apparatus through a network or a recording medium. second image processing apparatus performs a predetermined calculation with the use of the digital image data and confidential information and then compares a result of the predetermined calculation with the digital signature data to detect illegitimate processing applied to the digital image data. With these operations, the second image processing apparatus verifies the integrity of the digital image data.